COURSE TITLE: CARIBBEAN NATURE-BASED ECOTOURISM & CONSERVATION SCIENCE

NO. OF CREDITS: 4 QUARTER CREDITS WA CLOCK HRS: 40

(semester equivalent = 2.66 credits) OREGON PDUS: 40

INSTRUCTORS: CHANT THOMAS, M.S.

SUSANNA BAHAAR, M.A.

541/899-6906 chant@deepwild.org http://www.deepwild.org

TRAVEL DATES: Arrive: December 26, 2013 Depart: January 1, 2014

SUPPLEMENTARY MATERIALS

LIKELY SCHEDULE

Thurs. 12/26: Travel day; fly to Cancun; taxi to Cesiak. Arrival at Cesiak by 6 p.m.; dinner and introductions.

<u>Fri. 12/27:</u> Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30): Review syllabus, assign written work, introduction to Cesiak & staff, an eco-tourism destination. Tour focusing on Cesiak history, education and conservation programs (turtles, etc), alternative energy, dune restoration, botany, intro to Sian Ka'an, walk to dock, view map of laguna, discuss and plan week. Lunch at 1:00. Afternoon siesta to relax & recover from travel. Susanna's Spanish class before dinner with Margaritas.

<u>Sat. 12/28:</u> Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30): Indepth Natural History of Cesiak: botany, birding, reptiles and amphibians, dune restoration with Ana and Chant. Lunch at 1:00. After lunch: Guided discussion, review, journaling. Relax on beach. Susanna's Spanish class before dinner with Margaritas.

<u>Tues. 3/26:</u> Early morning excursion (taxi vans) to Tulum ruins with lecture on history of Tulum including Caste Wars & Maria Uicab, queen of Tulum. Lunch in Tulum Pueblo. After lunch: Excursion to Pet Cemetery cenote. Return for dinner at Cesiak with discussion review.

<u>Wed. 3/27:</u> Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30) Sian Ka'an Natural History: split group in half with kayak & boat trips. Afternoon session: morning kayakers take launch trip and visa versa. Dinner at Cesiak.

<u>Thurs. 3/28:</u> Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30): review and discussion, journaling. Lunch at 12:30. Afternoon session: beach clean-up, free time.

<u>Fri. 3/29:</u> Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30) with Cesiak staff. Discussion of eco-tourism in Tulum: federal versus state plans, benefits and impacts of present and planned levels of eco-tourism (economic, cultural, environmental). Afternoon session: review and discussion, journaling.

<u>Sat: 3/30:</u> Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30): summary discussions, journaling, written work review, final wrap-up. Afternoon free time to relax on beach, optional shopping in Tulum. Susanna's optional Margarita Spanish class before dinner. Farewell dinner, good-byes. Optional New Year's Eve in Tulum.

Sun: 3/31: Farewell breakfast. Goodbyes and taxis to Cancun airport.

COURSE DETAILS

Caribbean Nature-Based Ecotourism and Conservation Science in Mexico's Rivera Maya and Sian Ka'an Biosphere Reserve begins with our shuttle from Cancun International Airport to the Sian Ka'an UNESCO Biosphere Reserve south of Tulum as we notice the industrial "Fordist"* tourist development along the highway. In contrast, we pass the end of the paved road and land at Cesiak Ecologico Centro, a small ecotourism and education center that serves as base for our investigations of ecotourism as an alternative to the "Cancunization" of the northern Riviera Maya. From Cesiak, we will also explore the resource base for nature-based ecotourism: the unique biodiversity of this 1.3 million acre UNESCO World Heritage Site with its large fresh-water lakes, vast brackish lagoons with numerous mangrove islands, pristine rivers, jungles, grasslands, karst landscapes with fabulous cenotes (freshwater sink-holes), and the Caribbean Sea itself, all providing quality habitat for a variety of birds, mammals, reptiles, amphibians, and sea life.

* "Fordist" refers to the mass produced, mass advertised, assembly line mode of tourism as exemplified by Cancun and recent development along the Riviera Maya.

Our first full day features an orientation session, meeting each other and the staff at Cesiak, which serves as a model for sustainable ecotourism development in sensitive tropical ecosystems, operating with ecologically responsible technologies, including systems for wetlands wastewater management, rainwater catchment, and power generation through wind and solar sources. Revenues from Cesiak operations help fund their conservation and education programs, including dune restoration, sea turtle conservation, and nature study for local Mayan youth.

We will study and compare federal and industrial tourism pressures to heavily develop the Tulum area just north of Sian Ka'an, with investigations into the benefits and impacts (economic, social, cultural) of various types of tourism, including nature-based, cultural, "Fordist", and ecotourism. Our investigations will take us to the extremely popular ancient ruins of Tulum, the only such ruins on the coastline, where Maria Queen of the Maya protected 1,000 indigenous people while holding off the Mexican army and navy for several decades during the Caste Wars of the 1800's.

Modern development pressures and plans, from the proposed Riviera Maya International Airport near Tulum to increasing tourist capacity by a factor of 100, all threaten the lives and lands of present-day Maya and the natural biodiversity that supports a thriving and appropriately sized ecotourism focus unique to Tulum along the entire Riviera Maya. Our investigations will explore potential impacts to water quality, urban growth, local culture, and impacts to the second largest coral reef on the planet.

Experienced local guides will lead natural history investigations, including a hike to a cenote, a kayak paddle to mangrove islands, and a launch excursion across a lagoon and up a remote river. We will float back down a kilometer of crystal clear ancient Mayan canal on our life jackets. From the boat we will witness a wide variety of birds, fish, crocodiles, manatees, and peer into an underwater cenote.

Participants will have an opportunity to experience conservation volunteerism through an afternoon Caribbean beach cleanup, while learning about how the impacts of industrial tourism threaten sensitive coral reefs and sea turtle nesting grounds.

The human component of nature-based ecotourism will include how the Sian Ka'an UNESCO Biosphere Reserve serves as a model for incorporating indigenous fishing villages, small scale agriculture, and ecotourism as components of ecological stewardship and environmental protection. The local Maya will teach us some Mayan language and we will explore their history at the beautiful coastal ruins of Tulum.

ADDITIONAL PARTICIPANT EXPENSES:

- **Ground transportation:**_Shuttle Cancun Airport to Cesiak: the shuttle van service we use provides late-model deluxe private vans for approximately \$130 one-way, \$225 round trip non-stop (prices Dec. 2012). Participants with similar arrival times are encouraged to share a van and the cost (contact instructors for ride-share coordination). Other shuttle services are available with greatly varying costs. Non-stop shuttles to Cesiak (approx. 2-2.5 hours) are more expensive than shuttles that stop at several locations along the Riviera Maya. Least expensive (allow 4-5 hours) are the public busses that travel south from the airport along the Riviera Maya Highway as far as Tulum Pueblo, where a private taxi must be hired for the last leg down to Cesiak. Whichever way participants arrive, <u>all</u> participants must arrive by 6 p.m. at Cesiak.
- Airfare to and from Cancun: While it is difficult to predict airfares many months in advance, approximate airfares (over-night flights) as of 05/10/13: round trip from Seattle \$818; from Portland \$742; from Medford \$878. Fares generally are less expensive for flying Tuesday-Thursday, and for night flights (the quotes fares). Flights become more expensive closer to the flight dates. Participants should plan to arrive in Cancun by 2 p.m. to arrive at Cesiak by 6 p.m.
- Lodging and meals at Cesiak Ecologico Centro: Lodging for 6 nights at Cesiak (Dec. 26-31). Cesiak accommodations are primarily rustic tent cabins under thatched-roof frames. Queen bed cabins have greater views of the Caribbean; cabins with two double beds have smaller views. At holiday season nightly rates, queens are likely \$120; doubles \$100, double occupancy. Extra person is \$20. Cabins share common shower and toilet facilities. There is one deluxe house available with one private bedroom with queen bed, one bedroom with one double and one single bed, a futon in living room, and a large hammock on upstairs balcony; full bathroom in common area and ½ bath in queen bedroom, and small kitchen in house, which will have higher rates. Add 14% Mexico hotel tax to all lodging. Add tips for room maids. Note: Cesiak is under new ownership and any of the above details may change during 2013. Contact instructors to make your lodging reservations.
- Meals at Cesiak Ecologico Centro: Meals at Cesiak restaurant, which easily accommodates
 vegetarian and gluten-free diets and features fish caught each morning, beer, wine, and cocktails.
 Add 10% for tips. For three full meals, figure \$30-\$70/day depending on what you order and how
 much you eat!
- · Souvenirs and personal expenses
- Summary of sample additional participant expense budget (could vary significantly based on single or shared lodging and shuttle, size of meals and drinks):
 - \$900 Airfare & related expense (taxi, parking, etc)
 - \$125 Shared shuttle round trip to Cesiak
 - \$425 Shared lodging at Cesiak, including tips
 - o \$350 Meals at Cesiak, one lunch in Tulum
 - o \$1800 Basic total, not including souvenirs and personal items.

WHAT TO BRING:

Participants should bring items to enhance their comfort and experience in the class. We will be on the beach, kayaking, short hikes and walks, van travelling. Here are some suggestions.

PERSONAL: toiletries, medications, natural insect repellent special foods (there is a restaurant but no store near Cesiak).

CLOTHING: dress cool for the tropics, loose clothing, sun hat, light wind shell, sturdy sandals or sneakers, swimsuit.

GEAR: camera, binoculars, sun glasses, snorkel and fins.

EDUCATIONAL: small notebook, sketching pencils, guide books.

ASSIGNED READINGS

Note: See full detailed Annotated Bibliography for expanded annotations on page 4.

Assigned readings are all sourced on the Internet as described below.

- 1. To gain an overview of Sian Ka'an natural history, all participants will read the five short selections (Cesiak and UNESCO) and watch the short video in the Natural History Section.
- With individual participant coordination, one third of participants will read one of the three longer papers in the Conservation Science Section. Participants will both report on their readings during formal discussion sessions, and will informally share insights from their readings at appropriate times during the course.
- 3. With individual participant coordination, one third of participants will read two of the seven longer papers (Magali, Magnoni, Meyer-Arendt, Molina, Torres, Vidal, Ward) in the Ecotourism Section. Participants will both report on their readings during formal discussion sessions, and will informally share insights from their readings at appropriate times during the course.
- 4. Also in the Ecotourism Section, all participants will read the short Hacienda Tresrios piece, and the three short interviews with Les Schulman to inform their discussions of ecotourism.
- 5. Participants seeking 500 level University credit will read the Rosado paper on Maria Uicab and share this relatively unknown and intriguing story from local Mayan history.

ANNOTATED BIBLIOGRAPHY

NATURAL HISTORY SECTION

Centro Ecologico Sian Ka'an (CESIAK). *Facts of Sian Ka'an UNESCO World Heritage Biosphere Reserve*: www.cesiak.org/aboutsiankaan.htm (accessed 01/2013).

At this site, CESIAK provides statistics and basic information about the Sian Ka'an Biosphere Reserve, including size, weather, natural history, management, visitation, history of protection, and more.

Centro Ecologico Sian Ka'an (CESIAK). *Dune Restoration Nursery at Cesiak.* www.cesiak.org/nursery.htm (accessed 01/2013).

At this site, Cesiak provides an introduction to the Dune restoration Nursery in Tulum and two sites in Sian Ka'an. Information includes how the nursery provides plants used in coastal dune restoration, including projects with children as part of their education programs.

Centro Ecologico Sian Ka'an (CESIAK). *Flora of Cesiak*. <u>www.cesiak.org/flora.htm</u> (accessed 01/2013). At this site, Cesiak provides photographs and descriptions of several of the common plants occurring on the Cesiak campus.

Centro Ecologico Sian Ka'an (CESIAK). *Habitats found in Sian Ka'an UNESCO World Heritage Biosphere Reserve*. UNESCO. www.cesiak.org/habitat.htm (accessed 01/2013).

At this site, Cesiak provides photographs and descriptions of the dozen most common terrestrial and aquatic wildlife habitats in Sian Ka'an.

UNESCO (United Nations Educational Scientific and Cultural Organization). Description of Sian Ka'an. UNESCO., http://whc.unesco.org/en/list/410. Accessed 12/2012.

This site provides a more in-depth description of Sian Ka'an than the facts page on the Cesiak site. Scroll down to Long Description" UNESCO also provides an expandable list of their Red-Listed Species.

UNESCO. *Video of Sian Ka'an.* UNESCO. http://whc.unesco.org/en/list/410/video. Accessed 12/2012. In this video on just under 3 minutes, UNESCO provides a beautiful introduction to Sian Ka'an with aerial photography and a diving expedition into cenotes and underground rivers.

CONSERVATION SCIENCE SECTION

Garpow, Joan Wendy. A New Option for Protected Areas in Mexico's Mayan Riviera? A Case Study of the SUMA* Program in Akumal. Department of City and Regional Planning, University Center for International Studies, University of North Carolina, Chapel Hill. Carolina Papers: International Development No.1, Spring 2001. Accessed 12/2012:

http://cgi.unc.edu/uploads/media items/a-new-option-for-protected-areas-in-mexico-s-mayan-riviera.original.pdf

This paper investigates some of the issues facing the conservation of the Mayan Riviera's unique natural resources in light of a booming tourism industry. Three models of protected areas in the state of Quintana Roo are reviewed: a private reserve (El Eden), a state reserve (X'cacel), and a Biosphere Reserve (Sian Ka'an). A fourth model of protected area, the federal SUMA* program, is investigated in depth. Included is a summary of the goals and policies of the SUMA program, and details regarding how UMAs are established and operated. Also included is background information about the four UMAs that have already been established in the Mayan Riviera region. Finally, there is an in-depth case study of a proposed UMA in the small tourism community of Akumal. The paper concludes with an analysis of the program's potential effectiveness regarding environmental conservation and equitable economic development in the Mayan Riviera region.

*SUMA translated from Spanish: System of Management Units for the Conservation of Wildlife.

Hausman, Heidi. *Development in Tulum, Mexico: Considering Water Quality and Subaqueous Cave Locations*. Nicholas School of the Environment, Duke University, Durham, NC., 2009. Accessed 12/2012: http://www.oztotl.com/ps/reports/Development in Tulum.pdf.

Development is rapidly occurring along the Mayan Riviera in the Yucatan Peninsula, Mexico with little regard to environmental regulations or cultural wellbeing. In particular, fresh water must be considered when planning for future development. The sole source of fresh water in the Yucatan is from a karstic aquifer that is characterized by an extensive network of subaqueous caves, a system that is particularly sensitive to contamination. This master's project focuses on the current and future water supply for the town of Tulum since the town's future development will have long term repercussions on the surrounding environment. Two methods were used to determine how and where Tulum should or should not develop with regard to the protection of future water quality. Water samples collected around Tulum in the summer of 2008 were analyzed to determine the current water quality of wells and cenotes (sinkholes). Cave survey data that was collected by cave divers and the Quintana Roo Speleological Survey was used to create a map of the known cave systems. Satellite imagery was classified to determine the current land use/ land cover of the area and the extent of future development was estimated according to the Urban Development Plan (UDP) of Tulum.

Quintana-Rizzo, Dr. Ester, et al. *United Nations Environmental Programme: Regional Management Plan for the West Indian Manatee, <u>Trichechus mantus</u>. CEP Technical Report No. 48, UNEP Caribbean Environmental Programme, Kingston, Jamaica. 2010. Accessed 02/2013. http://www.cep.unep.org/meetings-events/vi-spaw-cop/manatee-report-1.pdf*

People over the world believe that marine mammals represent important resources of aesthetic, recreational, ecological, and economic significance. Considered in this way, people and governments have wisely encouraged sound management and conservation of marine mammals. Certainly, this is the case for manatees in the Wider Caribbean. This report recognizes the good work being done to study and conserve manatees in this region, but notes where efforts could be improved and makes suggestions about ways to move forward in the short and long terms.

The West Indian manatee (*Trichechus manatus*) ranges from the southeastern United States to northeastern South America, including Brazil, Trinidad and Tobago, and the Greater Antilles. West Indian manatees are present in twenty countries of the Wider Caribbean. As aquatic herbivores, they occupy a specialized niche in the ecosystem. This factor, along with their life history attributes (e.g., long lifespan, slow reproductive rate) make manatees susceptible to over-exploitation and environmental changes. Heavily hunted in the past, they have always played an important role in the folklore and traditions of indigenous people. Ecologically, manatees may serve as cultivation grazers, thus stimulating new growth and nutritional value of sea grasses and other aquatic vegetation.

The West Indian manatee has been identified by government and experts from the region as one of the priority protected species of the Wider Caribbean Region. Globally manatees have also received

protected status under the IUCN Red List where they have been placed as vulnerable. With the adoption in 1990 of the Cartagena's Convention Protocol Concerning Specially Protected Areas and Wildlife (SPAW) and in 1991 its lists of protected species, manatees and the rest of marine mammals in the region, were identified as requiring total protection. In 1995 and under the framework of SPAW, the first Regional Management Plan for the species was developed by the Caribbean Environment Programme (CEP) of the United Nations Environment Programme (UNEP). The overall objective of the Plan was to serve as a framework for the conservation of manatees and their habitat in the region. However, to be optimally effective, such plans require regular updating to reflect the current status of and threats to the species. To achieve this end, this, the second version of the plan, was generated.

ECOTOURISM SECTION

Hacienda Tresrios. *Riviera Maya Airport: Terminal or Takeoff?*, Hacienda Tresrios, Playa del Carmen, MX. 2010. Accessed 02/2013:

http://www.haciendatresrios.com/news-and-events/riviera-maya-airport-project-terminal-or-takeoff/
This brief article describes the history, pros and cons of the proposed major new airport outside of Tulum.

Magali, Oriol Daltabuil, et al. *Tourism Development in Quintana Roo, Mexico*, Cultural Survival Quarterly, March 2010, Cambridge, MA. Accessed 02/2013:

http://www.culturalsurvival.org/ourpublications/csq/article/tourism-development-quintana-roo-mexico

This essay is an outgrowth of our work in Quintana Roo on the impact of tourism on the Maya communities of this previously very remote Yucatecan region. These communities are experiencing intensified pressures to participate in the tourism industry as it undergoes a shift from highly localized resort development to a mode that increasingly stresses the marketing of the physical and human environment, including the archaeological remains of pre-Hispanic Maya civilization. This is a relatively complex scenario in which mass tourism, itself of quite recent origin, is not so much being displaced as supplemented by new, "soft-path" offerings.

The tourism situation needs to be seen as a whole, but some important questions can be posed on the shifts currently taking place. First, will the further penetration of tourism result in improved material and social conditions for the local population? Second, will these communities be given an opportunity to play a significant role in determining their own future? And, related to the latter question, can the Maya generate sufficient political power to protect their property rights and minimize the social and cultural costs of tourism? There are no simple answers to these questions, but we do have sufficient information to permit informed debate. In short, the history of economic and political penetration in this area does not augur well for the future welfare of the Quintana Roo Maya.

Magnoni, Aline, et al. *Tourism in the Mundo Maya: Inventions and (Mis)Representations of Maya Identities and Heritage.* Tulane University, New Orleans, LA. 2009. Accessed 02/2013: http://www.academia.edu/2460619/Tourism in the Mundo Maya Inventions and Mis Representations of Maya Identities and Heritage

This paper explores how Maya identities have been (mis)represented in the context of heritage tourism across the Mundo Maya and underscore the cultural heterogeneity and historical diversity of Maya speaking people. The focus is the Yucata´n peninsula, where we look at terms used to define social categories and ethnic groups through time. We then examine how tourism can affect notions of self-identify and self-ascription, by presenting our first-hand experience as archaeologists dealing with issues of Maya identity and heritage claims in the context of archaeological tourism development at the sites of Chunchucmil and Yaxuna, Yucatan. We propose the use of a 'relational approach' to identify formation processes in contrast to the more common genealogical approach. In addition, we believe that with the help of applied anthropologists archaeologists can be advocates for local communities and mediators among multiple stakeholders in situations where these communities are poised to benefit from tourism.

Meyer-Arendt, Klaus J., *The Costa Maya: Evolution of a Touristic Landscape*, Études caribéennes [En ligne], 13-14 | Décembre 2009, mis en ligne le 29 juin 2010, consulté le 02 mars 2013. http://etudescaribeennes.revues.org/3867. In English. Accessed 03/2013.

Only 50 years ago, Quintana Roo (then a territory, since 1974 a state) was described as "Mexico's Empty Quarter" by geographer Clinton Edwards (1957). Except for the capital city of Chetumal (on the southern border), the population was sparse, including the indigenous Maya who were concentrated mostly in the neighboring state of Yucatán. Settlements at Isla Mujeres (site of a small naval base), Puerto Juárez (today part of Cancún), Puerto Morelos, Playa del Carmen, and Cozumel drew a few adventurous tourists (Schell and Schell 1956). Since 1970, this Caribbean-facing edge of the Yucatán Peninsula has become the home of the leading single tourist destination within Mexico—Cancún—largely in response to a government-commissioned study to develop an "east-coast" resort destination to both counterbalance the Mexican Riviera on the Pacific coast and also to compete with Caribbean island resort destinations (Collins 1979). The growth of Cancún has been phenomenal, and Cancún's *zona hotelera* has become the quintessential "gringolandia", as noted by Torres and Momsen (2005) in a seminal article on the resort destination. Quintana Roo's population increased tenfold between 1970 and 2000, from 88,150 to 874,963 (Torres and Momsen 2005). Cancún proper has exploded from 120 residents in 1970 (117 in Pto. Juárez and 3 on Isla Cancún) to over 600,000 today (Wikipedia 2009), and unofficial estimates place the population closer to one million.

Molina, Conception, et al. *Guidelines for Low-Impact Tourism along the Coast of Quintana Roo, Mexico*. Amigos de Sian Ka'an, Cancun, MX. 2001. Accessed 02/2013. http://rmportal.net/library/content/aquatic_marine_coastal_zone/nor_0036.pdf

Several initiatives have emerged in recent years that reaffirm the importance of conservation of our coastal zone. Mexico's National Policy and Strategy for Sustainable Tourism sets out the overall framework for applying a number of environmental policy instruments to this goal, for example the Environmental Strategy for Integrated Management of Mexico's Coastal Zone. Yet even with these important conservation efforts aimed at halting and mitigating environmental deterioration in the coastal zones of our country, we still face important challenges ahead. Current trends are leading towards increased levels of irreversible impact to these fragile ecological systems. Our environmental policy must be capable of achieving the national policy objective of growth with quality. Quintana Roo is perhaps one of the states that best exemplifies this situation. Practically all of the coastal zone has ecological zoning ordinances at different stages of preparation. In some of the regions, such as the Cancun-Tulum coastal corridor, the plan is being updated. In others, plans have just recently been approved, such as Costa Maya and the mainland portion of Isla Mujeres. Quintana Roo also created Mexico's first biosphere reserve for the Sian Ka'an ecosystem. In sum, we have made important advances in our knowledge of coastal ecosystems and expanded our ability to identify acceptable limits on changes in natural processes through planning and regulatory tools. However, these measures are proving difficult to implement in practice. The complexity and magnitude of degradation of coastal ecosystems has made it clear that awareness of the problem of implementation be more widely appreciated. This will help in the search for leverage points and processes that will lead to sustainability, and help us foresee the indirect and long-term impacts of development. The possibility of incorporating tourism activity as a strategic component of economic development, depends on our capacity to correctly identify environmental requirements and conditions for its success. This insight requires taking an integrated focus that is sensitive to local situations and priorities, sufficiently flexible and receptive to the continuous changes that occur in the coastal systems, and that is reinforced with other outreach tools and environmental regulations.

Rosado, Georgina Rosado and Rivas, Landy Santana. *Maria Uicab: Queen, Priestess, and Military Leader of Maya Rebels in Yucatan (1863-1875)*. University of Yucatan, Merida, MX. Accessed 02/2013. http://dialnet.unirioja.es/servlet/articulo?codigo=2704203

Note: click on: "Texto completo (pdf)" for full paper. This paper is in Spanish. Use an internet translation service (e.g. bing) to translate into English.

An Indian rebellion referred to by historians as the Caste War broke out in Yucatan, Mexico, in 1847. While much has been written on the subject, few texts have examined the role played by women in the uprising and in the autonomous society set up by rebels in the back country of what is today Quintana Roo. This article looks at the participation of women members of the nobility in organizing a military theocracy, in particular the role played by Maria Uicab, queen and priestess.

Shulman, Les. Sustainability in the Riviera Maya Interview, Bella Online: The Voice of Women. 2011. Accessed 02/2013.

Part 1: http://www.bellaonline.com/articles/art175644.asp
Part 2: http://www.bellaonline.com/articles/art175676.asp

"When I visited the Riviera Maya for the first time on a trip that was focused on my primary interest of nature appreciation/birding, I was the guest of the Hotel Amarte Maroma. The Amarte is a 24-bungalow lush tropical garden-style upscale resort and spa that accurately bills itself as "an elegant bohemian village." Just off of Highway 307 and about 2 kilometers from why the majority of tourists visit the Riviera Maya, to bask on its long, wide, white sand beaches set by the turquoise Caribbean Sea, the hotel is about a thirty minute drive south from Cancun and around fifteen minutes south from ever-growing Playa del Carmen. While at the Amarte, based both on my observations of the facility which had frequent non-tourist visitors like endemic Yucatan Jays, Tropical Mockingbirds, Social Flycatchers, Great-Tailed Grackles, multiple species of hummingbirds, doves, and butterflies, and, of course, ever-present lizards and iguanas, and in talking with its staff, it was quite apparent that the hotel was designed and operated with the responsible intent of preserving (even enhancing!) its natural surroundings.

Unfortunately, that concern for sustainable ecological preservation is disturbingly, deleteriously and decidedly not evident in the vast majority of the past and current development in this relatively newly established, highly popular touristic zone in the midst of wondrous, naturalistic multidiversity. You see, located on the Yucatan Peninsula in the Mexican state of Quintana Roo, the country's newest state that was established in 1974, the Riviera Maya which presently stretches in an ever-sprawling manner from Puerto Morelos, 36 km/22 miles south of Cancun to Punta Allan, 180 km/112 miles south of Cancun, has been victim to primarily unplanned and environmentally unconcerned overdevelopment. Not the only source of this habitat disturbance and destruction as ever-sprouting shopping plazas, parking lots, theme parks, housing complexes, and condominiums are also culpable, the predominant facilitator of this potential ecological tragedy are the very large to humungous All-Inclusive Resorts, situated directly on the edges of the beaches on ex-jungle and ex-mangrove terrain. These (not so super) super structures are more and more dominating the touristic infrastructure there.

To discuss this rapidly changing area's promotion and perpetuation of sustainable tourism in this ecologically interdependent and fragile region, I conducted an email interview with Michael P. Halle who is the general manager of the Hotel Amarte Maroma and the Villa Angela on Maroma Bay. Mike is a Canadian who for the past decade has worked and lived among the Maya in the Yucatan and is currently senior strategist for the Riviera Maya Tourist Board. With twenty years experience as a hotel and resort manager, his professional roles have included Senior Tourism Marketing Research and Strategic Advisor to the administrations of two Mexican President's, as well as four Federal Mexican Secretaries of Tourism; also, he has worked with Tourism Secretary Silvia Hernandez to create the Mexico Tourism Board which is solely responsible for managing the Mexico Brand, worldwide. Moreover, Mike is a writer presently researching and writing a book called "Circular Time: The Story of the Contemporary Maya in the Yucatan of Mexico" and is an artist who combines abstract expressionism and representational expressionism. Philosophically, Mike's stated mission "is to help sensitize the traveling public to the issues and impacts of tourism to the ecosystem, biodiversity, and host cultures."

The above and following is the first of a three part series of "interview" articles that consisted of five questions posed to Mr. Halle that centered on issues revolving around SUSTAINABILITY: THE FUTURE OF TOURISM IN THE RIVIERA MAYA.

Torres, Rebecca. Cancun's Tourism Development from a Fordist Spectrum of Analysis. East Carolina University, Greenville, NC. 2002.

http://www.sagepub.com/mcdonaldizationstudy5/articles/Leisure%20and%20Tourism Articles%20PDFs/Torres.pdf

Tourism scholars in recent years have posited a global paradigmatic shift from Fordist to more post-Fordist and neo-Fordist modes of tourism production and consumption. This article provides a brief literature review of transformations in global tourism production and consumption from a Fordist spectrum of analysis. Following a discussion of tourism development in Cancun and the surrounding state of Quintana Roo, this article draws on empirical data from a survey of 615 visitors to the Yucatan Peninsula and 60 Cancun hotels to provide a contextual application of the Fordist spectrum in understanding the nature of tourism production and consumption in the region. Cancun is situated as a predominately Fordist mass tourism resort, however, analysis reveals that the region's tourism landscape, which is experiencing processes of diversification, is in

reality a complex combination of both Fordist and post-Fordist elements manifest in different 'shades' of mass tourism, 'neo-Fordism' and 'mass customization'. The article concludes that the Fordist spectrum of analysis provides a useful perspective from which to examine the changing nature of tourism production and consumption. "Fordist" refers to the mass produced, mass advertised, assembly line mode of tourism as exemplified by Cancun and recent development along the Riviera Maya.

Vidal, Omar. Strengthening Policy Tools to Achieve Integrated Coastal Management. World Wildlife Fund Mexico Program Office, Mexico City. 2004. http://pdf.usaid.gov/pdf_docs/PDACA238.pdf

Caribbean. It is one of WWF's highest international priorities for conservation and is threatened by rapidly expanding interest on the part of multinational developers. These powerful organizations catalyze rapid development and make it difficult to exercise local control. The experiences of the Riviera Maya (the Cancun-Tulum Corridor) indicate that in order to accomplish conservation objectives in Costa Maya, it is necessary to be able to enforce compliance with existing conservation regulations. In Mexico, the legal tool driving development on a sustainable basis is the "Ecological Territorial Ordinance" (ETO); however, as in the case of the Riviera Maya, the ETO is still a tool that needs to be strengthened. Contributing to this problem is both a lack of enforcement and a weak interest in complying with legal tools. These factors are compounded in some cases by corruption.

It is also important to consider how the development of Costa Maya influences other areas along the coast and protected areas such as Banco Chinchorro Biosphere Reserve and Xcalak Reefs National Park. The development of Costa Maya will increase infrastructure and numbers of visitors to the area, leading to high demand for local resources and the transformation of the landscape. Never before had there been so much new infrastructural development in this ecoregion in so little time as there is now in the Mexican state of Quintana Roo. Damage to the fragile reef ecology from increased sewage, garbage, and bilge dumping; toxic spills; draining of mangroves; reckless navigation; careless anchoring on the corals; overfishing; and illegal extraction of reef creatures for souvenirs and aquariums are common and are expected to increase with increased tourism to the area.

The most extreme example of this development is Cancun, just north of the Costa Maya. This mass tourism mecca grew from a population of nearly zero in the 1970's to its current status as the largest city in the state. The Cancun development strategy depends on mass volume, low quality, low cost, and quick turnover tourism, largely catering to young, lower-middle income Americans. South of the Cancun-Tulum Corridor, buffered by the Sian Ka'an Biosphere Reserve, lies the Costa Maya, WWF's area of focus. Protection of the Costa Maya is vital to conservation of the Mesoamerican Reef (MAR).

Although the Costa Maya's Ecological Territorial Ordinance has been technically defined, economic interests have thus far prevented its implementation, thereby threatening the area with a destiny similar to that of the Cancun-Tulum Corridor. WWF will continue to push for implementation of a rigorous ETO for the Costa Maya. If successful, this would mobilize urgently needed controls on the tourism market. WWF has taken several important steps needed to influence the ETO process. The long-term goal of this project is to conserve the resources and ensure sustainable development in the Costa Maya. Our conservation strategy involves using both push (and control) factors to detain harmful coastal tourism development and overfishing, and pull (or incentive) factors to mobilize producer and consumer demand for sustainable fisheries and eco-tourism in the Costa Maya. The Costa Maya's most critical protected areas need to be consolidated as vital places of refuge for species and ecosystems currently threatened by over-fishing and destructive tourism.

Ward, Natasha Kate. Ecotourism: Reality or Rhetoric: Ecotourism Development in the State of Quintana Roo, Mexico. Planeta.com. 1997. http://www.planeta.com/ecotravel/mexico/yucatan/ward/ward.html. Accessed 01/13.

Ecotourism is tourism that is based on the natural environment. While no satisfactory universal definition has been found there is general agreement that it seeks to minimize the negative impacts on the environment while contributing to the conservation of the region. This study attempts to provide a clear

definition of the concept and goals of ecotourism. It will concentrate on an assessment of the tourist industry in Mexico, looking at the potential and suitability of ecotourism in the state of Quintana Roo. Specific ecotourism projects are assessed to prove that whilst some projects claiming to be ecotourism go part way to offering a more sustainable alternative (environmentally, socially and economically), the prefix 'eco' has been given away all too easily. The research will show that ecotourism does not achieve all it may claim to, and in fact may create more problems than possible benefits. These include the inadvertent opening up of previously undeveloped areas (spear heading) by foreign companies taking advantage of the niche in the market to 'eco' sell their product.

Chapter One provides an overview of the world tourist industry and the third world tourist market and its associated advantages and disadvantages. This is discussed in the wider frame of third world development. Chapter Two discusses the 'fuzzy' notion of ecotourism, looking at the differences in definition and presents them on a continuum of the ecotourism paradigm. Aims of, and goals for ecotourism will be established to enable an assessment of different projects in later chapters. Chapter Three focuses on the tourist industry in Mexico. In the light of the wide spread environmental devastation caused by mass tourism in certain areas, Mexico is now opting for a more sustainable approach to tourism development. The potential and the possible pitfalls are discussed. Chapter Four assesses a number of current intergovernmental, national and private ecotourism projects in Quintana Roo. These, grouped as, are assessed using the criteria outlined in chapter two. This study concludes that tourism is clearly a large industry that is destroying the natural and cultural environment at an alarming rate.

While ecotourism is not as environmentally friendly as it claims to be, it does exist to a limited degree, and in Mexico it offers a relatively suitable and more desirable form of tourism for the region of Quintana Roo. While ecotourism is an industry in its infancy there is clearly a large amount of literature available. Books offer a limited supply of information and are mainly concerned with the concept of tourism from a development perspective and more recently the negative effects of mass-tourism. However there is an increasingly large amount of material available in the form of magazine articles that specifically deal with the idea of nature tourism in developing countries. Since the ecotourism destinations discussed in chapter four are considerably new developments in Quintana Roo, there is a lack of available data. At this stage the Internet proved to be an invaluable source of information. Organizations such as Latin American Bureau, Survival, the Ecumenical Coalition on Third World Tourism were also able to supply relevant material. Further information had been collected during my stay in Mexico, through interviews and visits to the ecotourism destinations that are assessed in this Final Chapter.